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*BC8*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/151,555    09/11/98    HAZRA    R    42390.P5277

WM31/0214

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EXAMINER

ROGERS, S

ART UNIT

PAPER NUMBER

2624

DATE MAILED:

*7*  
02/14/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/151,555

Applicant(s)  
Hazra et al

Examiner  
Scott Rogers

Group Art Unit  
2724



☒ Responsive to communication(s) filed on Nov. 15, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-29 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-29 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 11-17, 19-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over a combination of Fan (US 5359676) and Go (US 5878172).

Fan discloses generation of an edge detection map along horizontal and vertical direction for a decoded image. See col. 10, lines 27-44. Fan also discloses edge-sensitive post-filtering to enhance the decoded image which is controlled by the edge detection map. See col. 11, lines 9-14. Fan does not disclose generation of the edge detection map for an uncoded image to be coded, coding the edge detection map for transmission via a communication channel along with an associated coded image, and decoding the coded edge detection maps.

Go discloses generation of the edge detection map (21) for an uncoded image to be coded, coding the edge detection map (24) for transmission via a communication channel along with an associated coded image, and decoding the coded edge detection maps (31).

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It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have derived from a combination of Fan and Go, an video processing system, method, or program for generating edge detection maps prior to encoding image data and transmitting the coded edge detection maps together with the coded image data via a band limited transmission channel to a decoder to be decoded with the coded image data for use in controlling a edge-sensitive post-filter. Such a combination would have an improved reduction in the irregularity and fragmentation of edges in post-filtered decoded images.

Claims 8-10, 18, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fan and Go, as applied to claims 6, 17, and 27 above, and further in view of well known prior art (MPEP 2144.03).

While the combination of Fan and Go transmits the coded edge detection map and associated image data multiplexed together, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have transmitted the coded edge detection map and associated image data separately since it is well known in the art to transmit associated data separately and this would eliminate the need to perform multiplexing and demultiplexing.

While the combination of Fan and Go does not store either together or separately the coded edge detection map and associated image data, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have provided such storage as it is well known in the art to store either together or separately associated data and such storage

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would provide the advantage of archiving the data in a compressed form requiring less storage capacity and eliminating the need to again code the data for repeated or later transmission.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

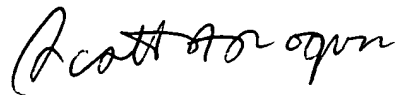
**or faxed to:**

(703) 308-9051 (for *formal* communications intended for entry)

(703) 306-5406 (for *informal* or *draft* communications, please label  
"PROPOSED" or "DRAFT")

*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this application should be directed to **Scott Rogers** at **(703) 305-4726** or Internet e-mail address **scott.rogers@uspto.gov**. The group receptionist telephone number is **(703) 305-4700** or **4750**.



SCOTT A. ROGERS  
PRIMARY EXAMINER  
ART UNIT 2624

February 8, 2001